



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/844,932	04/26/2001	Erin H. Sibley	PD-201027A	2067

7590 04/22/2005

Hughes Electronics Corp.
Corporate Patents & Licensing
Bldg. R11, Mail Station A109
PO Box 956
El Segundo, CA 90245-0956

EXAMINER

USTARIS, JOSEPH G

ART UNIT	PAPER NUMBER
----------	--------------

2616

DATE MAILED: 04/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/844,932

Applicant(s)

SIBLEY, ERIN H.

Examiner

Joseph G Ustaris

Art Unit

2616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☒ Claim(s) 5, 6, 11 and 12 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 4/26/01.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Information Disclosure Statement

1. The information disclosure statement (IDS) was submitted on 26 April 2001. The submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

Claim Objections

2. Claims 5, 6, 11, and 12 are objected to because of the following informalities:
 - Claim 5 recites "timer" on line 2. The examiner recommends changing "timer" to --tuner--.
 - Claim 6 recites "timer" on line 2. The examiner recommends changing "timer" to --tuner--.
 - Claim 11 recites "timer" on line 2. The examiner recommends changing "timer" to --tuner--.
 - Claim 12 recites "timer" on line 2. The examiner recommends changing "timer" to --tuner--.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1 and 13 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Regarding claims 1 and 13, the specification discloses inserting a digital video stream within a vertical blanking interval in paragraph 0047 and Figs. 4 and 5. However, in the cable television art, the vertical blanking interval does not have sufficient bandwidth to carry a video stream. The specification merely discloses using MPEG4 (or other suitable video compression software) to compress the video stream to fit inside the relatively small bandwidth of the vertical blanking interval. It is not clear how this is done; the specification provides no additional details regarding what structure would actually be able to accomplish this. It is unclear how one with ordinary skill in the art would insert a digital video stream within the vertical blanking interval. As best understood from the specification, the examiner will read "digital video stream" as graphics or still video images.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the

Art Unit: 2616

applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1 and 13 are rejected under 35 U.S.C. 102(e) as being anticipated by Kim (US006556248B1).

Regarding claim 1, Kim discloses a general TV receiving apparatus or "portable user appliance", where inherently the TV receiving apparatus is easily movable or "portable" (See Fig. 3). The TV receiving apparatus is able to receive HTML image and audio data or "digital video stream" this is "embedded in a vertical blanking interval of a broadcast television signal" (See Fig. 3; column 5 lines 6-31). The TV receiving apparatus includes a "television tuner for receiving the over-the-air broadcast signal" (See Fig. 3, tuner 11 and ANT; column 2 lines 48-57), a "vertical blanking interval frame grabber for receiving the digital video stream" (See Fig. 3, tuner 100 and TV decoder 103; column 5 lines 1-14), a "digital decompressor for decompressing said digital video stream into a decompressed video stream" (See Fig. 3, HTML decoder 104; column 5 lines 6-27), and a "display displaying the decompressed video stream" (See Fig. 3, CRT; column 5 lines 15-18).

Claim 13 contains the limitations of claim 1 and is analyzed as previously discussed with respect to that claim.

Claims 7 and 15 are rejected under 35 U.S.C. 102(e) as being anticipated by Shintani et al. (US006661472B2).

Regarding claim 7, Shintani et al. (Shintani) discloses a digital television or "portable user appliance", where inherently the digital television is easily movable or "portable" (See Fig. 1b). The digital television receives "a digital video stream embedded in excess bandwidth of an over-the-air digital broadcast television signal" (See column 1 lines 18-29), where a standard 6 MHz channel within the frequency spectrum or "over-the-air digital broadcast television signal" has "excess bandwidth" in order to carry extra "digital video streams". The digital television includes a "television tuner receiving the over-the-air digital broadcast signal" (See Fig. 1b, tuner 160; column 4 lines 24-30), where the tuner also serves as the "excess bandwidth frame grabber for receiving the digital video stream". The digital television also includes a channel processing circuit or "a digital decompressor for decompressing said digital video stream into a decompressed video stream" (See Fig. 1b, channel processing circuit 170; column 4 lines 24-43) and a "display displaying the decompressed video stream" (See Fig. 1b, display 155; column 4 lines 42-43).

Claim 15 contains the limitations of claim 7 and is analyzed as previously discussed with respect to that claim.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2, 3, and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kim (US006556248B1) in view of Cho (US005760848A).

Claim 2 contains the limitations of claim 1 and is analyzed as previously discussed with respect to that claim. However, Kim does not disclose a "cradle receiving said portable user appliance".

Cho discloses a video monitor or "portable user appliance" that can be used as a television receiver (See Fig. 2, column 1 lines 50-62). The video monitor includes a body apparatus or "cradle", where the video monitor can be docked with the body apparatus (See Fig. 2, video monitor 20 and body apparatus 10). Furthermore, the body apparatus is coupled to the antenna or "first antenna" of the video monitor (See Fig. 2). Therefore, it would have been obvious to one with ordinary skill in the art at the time the invention was made to modify the TV receiving apparatus disclosed by Kim to include a cradle that "receives the portable user appliance" and is coupled to the antenna, as taught by Cho, in order to provide an easy means of connecting and disconnecting cables and various other sources to the TV receiving apparatus thereby making the system more convenient for the user.

Regarding claim 3, the body apparatus is also disposed within an automotive vehicle (See Cho column 4 line 63 – column 5 line 18).

Claim 14 contains the limitations of claims 3 and 13 (wherein the antenna of the video monitor is also the "automobile antenna" since it's the antenna that receives television signal within the automobile) and is analyzed as previously discussed with respect to those claims.

Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kim (US006556248B1) in view of Cho (US005760848A) as applied to claims 2, 3, and 14 above, and further in view of Rudolph (US005949498A).

Kim in view of Cho does not disclose a "second antenna" and a "control circuit for determining a first signal strength of said first signal and a second signal strength of said second signal and comparing the first signal strength to the second signal strength and coupling the greater of the first signal strength and the second signal strength to said portable user device".

Rudolph discloses a diversity antenna system for receiving television signals. The system includes multiple antennas or "second antenna" (See Fig. 2, antennas 9) and a "control circuit for determining a first signal strength of said first signal and a second signal strength of said second signal and comparing the first signal strength to the second signal strength and coupling the greater of the first signal strength and the second signal strength to said portable user device" (See Fig. 2, antennas 9, diversity control 8, comparator 10, change-over switch 6; column 1 lines 10-25 and column 3 lines 40-67). Therefore it would have been obvious to one with ordinary skill in the art at the time the invention was made to modify TV receiving apparatus disclosed by Kim in view of Cho to include a "second antenna" and a "control circuit for determining a first signal strength of said first signal and a second signal strength of said second signal and comparing the first signal strength to the second signal strength and coupling the greater of the first signal strength and the second signal strength to said portable user

device", as taught by Rudolph, in order to ensure that the best possible signal is being received thereby ensuring higher quality video/audio signals.

Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kim (US006556248B1) in view of Leermakers (US 20030105845A1).

Claim 5 contains the limitations of claim 1 and is analyzed as previously discussed with respect to that claim. However, Kim does not disclose that the TV receiving apparatus is embodied as a "personal digital assistant".

Leermakers discloses personal multimedia appliances that can receive programs over various air or cable broadcast systems. The personal multimedia appliances take the form of "personal digital assistant" that includes a tuner and display (See Fig. 2; paragraph 0011 and 0024). Therefore, it would have been obvious to one with ordinary skill in the art at the time the invention was made to modify the TV receiving apparatus disclosed by Kim to be embodied as a "personal digital assistant", as taught by Leermakers, in order to provide an appliance that is easier to carry around in a bag or pocket of the user.

Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kim (US006556248B1) in view of Yang (US006529742B1).

Claim 6 contains the limitations of claim 1 and is analyzed as previously discussed with respect to that claim. However, Kim does not disclose that the TV receiving apparatus is embodied as a "cellular phone".

Yang discloses a cellular phone that is capable of receiving television signals. The cellular phone includes a TV tuner that is able to receive television programs and display the programs on the display (See Fig. 1). Therefore, it would have been obvious to one with ordinary skill in the art at the time the invention was made to modify the TV receiving apparatus disclosed by Kim to be embodied as a "cellular phone", as taught by Yang, in order to provide an appliance that is easier to carry around in a bag or pocket of the user and that provides multiple functions, e.g. TV and phone.

Claims 8 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shintani et al. (US006661472B2) in view of Cho (US005760848A).

Claim 8 contains the limitations of claim 7 and is analyzed as previously discussed with respect to that claim. However, Shintani does not disclose a "cradle receiving said portable user appliance".

Cho discloses a video monitor or "portable user appliance" that can be used as a television receiver (See Fig. 2, column 1 lines 50-62). The video monitor includes a body apparatus or "cradle", where the video monitor can be docked with the body apparatus (See Fig. 2, video monitor 20 and body apparatus 10). Furthermore, the body apparatus is coupled to the antenna or "first antenna" of the video monitor (See Fig. 2). Therefore, it would have been obvious to one with ordinary skill in the art at the time the invention was made to modify the digital television disclosed by Shintani to include a cradle that "receives the portable user appliance" and is coupled to the antenna, as taught by Cho, in order to provide an easy means of connecting and disconnecting

Art Unit: 2616

cables and various other sources to the TV receiving apparatus thereby making the system more convenient for the user.

Regarding claim 9, the body apparatus is also disposed within an automotive vehicle (See Cho column 4 line 63 – column 5 line 18).

Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shintani et al. (US006661472B2) in view of Cho (US005760848A) as applied to claims 8 and 9 above, and further in view of Rudolph (US005949498A).

Shintani in view of Cho does not disclose a “second antenna” and a “control circuit for determining a first signal strength of said first signal and a second signal strength of said second signal and comparing the first signal strength to the second signal strength and coupling the greater of the first signal strength and the second signal strength to said portable user device”.

Rudolph discloses a diversity antenna system for receiving television signals. The system includes multiple antennas or “second antenna” (See Fig. 2, antennas 9) and a “control circuit for determining a first signal strength of said first signal and a second signal strength of said second signal and comparing the first signal strength to the second signal strength and coupling the greater of the first signal strength and the second signal strength to said portable user device” (See Fig. 2, antennas 9, diversity control 8, comparator 10, change-over switch 6; column 1 lines 10-25 and column 3 lines 40-67). Therefore it would have been obvious to one with ordinary skill in the art at the time the invention was made to modify digital television disclosed by Shintani in

view of Cho to include a "second antenna" and a "control circuit for determining a first signal strength of said first signal and a second signal strength of said second signal and comparing the first signal strength to the second signal strength and coupling the greater of the first signal strength and the second signal strength to said portable user device", as taught by Rudolph, in order to ensure that the best possible signal is being received thereby ensuring higher quality video/audio signals.

Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shintani et al. (US006661472B2) in view of Cho (US005760848A) and in further view of Rudolph (US005949498A) as applied to claim 10 above, and further in view of Leermakers (US 20030105845A1).

Shintani in view of Cho and in further view of Rudolph does not disclose that the digital television is embodied as a "personal digital assistant".

Leermakers discloses personal multimedia appliances that can receive programs over various air or cable broadcast systems. The personal multimedia appliances take the form of "personal digital assistant" that includes a tuner and display (See Fig. 2; paragraph 0011 and 0024). Therefore, it would have been obvious to one with ordinary skill in the art at the time the invention was made to modify the digital television disclosed by Shintani in view of Cho and in further view of Rudolph to be embodied as a "personal digital assistant", as taught by Leermakers, in order to provide an appliance that is easier to carry around in a bag or pocket of the user.

Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shintani et al. (US006661472B2) in view of Yang (US006529742B1).

Claim 12 contains the limitations of claim 7 and is analyzed as previously discussed with respect to that claim. However, Shintani does not disclose that the digital television is embodied as a "cellular phone".

Yang discloses a cellular phone that is capable of receiving television signals. The cellular phone includes a TV tuner that is able to receive television programs and display the programs on the display (See Fig. 1). Therefore, it would have been obvious to one with ordinary skill in the art at the time the invention was made to modify the digital television disclosed by Shintani to be embodied as a "cellular phone", as taught by Yang, in order to provide an appliance that is easier to carry around in a bag or pocket of the user and that provides multiple functions, e.g. TV and phone.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Please take note of Yuen et al. (US006452640B1) and Beckmann et al. (US006675388B1) for their similar use of the VBI to deliver data.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph G Ustaris whose telephone number is 571-272-7383. The examiner can normally be reached on M-F 7:30-5PM; Alternate Fridays off.

Art Unit: 2616

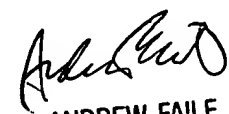
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew I Faile can be reached on 571-272-7375. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



JGU

April 7, 2005



ANDREW FAILE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600